

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

**MAILED**

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

**OCT 28 1999**

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte RUDOLF ECKARDT and HANS-JOACHIM JANSCH

Appeal No. 1996-1528  
Application No. 08/275,025<sup>1</sup>

HEARD: October 19, 1999

Before WARREN, WALTZ, and SPIEGEL, Administrative Patent Judges.  
WALTZ, Administrative Patent Judge.

**DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 7, which are the only claims in this application.

According to appellants, the invention is directed to a process for producing carbamazepine by the reaction of iminostilbene directly with an alkali cyanate in acetic acid, or a mixture of acetic acid with water, or a mixture of acetic acid

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<sup>1</sup> Application for patent filed July 14, 1994.

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with alcohol (Brief, page 2). Appellants state that the claims "are divided into two groups" based on claim 1 in that the recited acetic acid forms one group while the recited aqueous or alcoholic acetic acid medium forms the other group (Brief, page 3). However, in accordance with the provisions of 37 CFR § 1.192(c)(7) and (c)(8)(1995), appellants have not stated that the claims do not stand or fall together and have not explained why the claims are separately patentable, i.e., appellants have not explained why specific claims are separately patentable but have only argued specifically that parts of claim 1 are separately patentable. Accordingly, we select claim 1 from the group of claims and decide this appeal as to this ground of rejection on the basis of claim 1 alone. See 37 CFR § 1.192(c)(7)(1995); *In re Herbert*, 461 F.2d 1390, 1391, 174 USPQ 259, 260 (CCPA 1972). Claim 1 is illustrative of the subject matter on appeal and is reproduced below:

1. A process for producing carbamazepine which comprises reacting iminostilbene with an alkali cyanate in acetic acid, or a mixture of aqueous acetic acid with water, or within alcohol and recovering the resulting carbamazepine.

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The examiner has relied upon the following reference as evidence of obviousness:

Acklin et al. (Acklin)                      0 277 095 A1                      Aug. 8, 1988  
(Published European Patent Application)<sup>2</sup>

Claims 1 through 7 stand rejected under 35 U.S.C. § 103 as unpatentable over Acklin (Answer, page 2). We affirm this rejection for reasons which follow.

#### OPINION

In our review of the examiner's obviousness analysis, we must first construe the claim to define the scope and meaning of each limitation. See *Gechter v. Davidson*, 116 F.3d 1454, 1457, 1460 n.3, 43 USPQ2d 1030, 1032, 1035 n.3 (Fed. Cir. 1997). It is

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<sup>2</sup>The examiner initially relied upon an English abstract of this document as basis for the rejection (see the Final Rejection dated Apr. 27, 1995, Paper No. 7, page 3, second paragraph, the Advisory Action dated May 17, 1995, Paper No. 9, page 2, and the Brief, pages 3-4). Appellants submitted a partial English translation of this document as an attachment to the Brief (see the Brief, page 4). The examiner does not refer to this partial translation but notes that "(English Translation enclosed)" with regard to the Acklin reference (Answer, page 2). All reference to Acklin in the Answer is from this translation and not from the translation submitted by appellants (see the Answer, page 5, and the Reply Brief, page 1, first paragraph). This full English translation of Acklin has been made of record in the file. At the telephonic oral hearing, appellants' attorney assured this merits panel that, although he did not receive the full English translation of Acklin with the Answer, he possessed an English translation of all pertinent parts of the reference and was fluent in German (the language of the reference). Accordingly, we will refer to and cite from the full English translation of Acklin of record and attach a copy of this translation to this decision.

well settled that during patent examination, claims must be interpreted as broadly as their terms reasonably allow. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). Accordingly, we construe claim 1 as reciting a process for producing carbamazepine which comprises reacting iminostilbene with an alkali cyanate in any one of three mediums, acetic acid, a mixture of aqueous acetic acid and water, or a mixture of acetic acid with alcohol, with the subsequent recovery of carbamazepine (see claim 1).<sup>3</sup> The transitional term "comprises" opens the claimed process to the inclusion of other steps and ingredients/reactants. See *Exxon Chemical Patents Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555, 35 USPQ2d 1801, 1802 (Fed. Cir. 1995); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981).

Acklin discloses the preparation of carbamazepine by reacting iminostilbene with cyanuric acid in one stage (page 2, first and last paragraphs). Acklin teaches that one way of producing the cyanuric acid reactant is by treating a solution

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<sup>3</sup>The term "within alcohol" in claim 1 is construed to mean a mixture of acetic acid with alcohol, in light of the specification (see page 3, lines 13-14, and the paragraph bridging pages 3-4). See *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983).

and/or suspension of one of its salts (preferably sodium or potassium cyanate) with an acid (page 3, last paragraph). This reaction is preferably carried out in an organic solution/solvent (page 4, first full paragraph) and in the presence of a catalytic amount of an acidic agent (page 6).

Appellants are correct in arguing that Acklin teaches that the acid reactant with the alkali cyanate is "generally ... all proton donors whose acidic strength suffices to push cyanuric acid from their salts." (page 5, second full paragraph). Acklin further teaches that suitable acids are organic carboxylic acids "whose acidic strength in the used solvent corresponds to at least that of the formic acid" (*Id.*), which would exclude acetic acid.<sup>4</sup> However, Acklin teaches that the acidic agent that acts as a catalyst may be acetic acid (page 7, first full paragraph). Acklin also teaches that a suitable organic solution for the reaction would include acetic acid (page 4, second full paragraph). Accordingly, we agree with the examiner that Acklin clearly discloses and suggests the use of acetic acid in the process of reacting iminostilbene and alkali cyanate (see the Answer, page 4, last paragraph).

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<sup>4</sup>See the evidence submitted by appellants with the Reply Brief that formic acid is a stronger acid than acetic acid.

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Acklin not only discloses and suggests the use of acetic acid in the reaction of iminostilbene and alkali cyanate but specifically exemplifies acetic acid as both a catalyst and a solvent medium (see pages 7-13 and claims 4, 7, 8 and 14 on pages 14-16). Furthermore, Acklin discloses a specific example where iminostilbene is suspended in acetic acid, sulfuric acid is added followed by the addition of sodium cyanate to produce carbamazepine (see Example 2 on page 10 and also claims 22 and 24 on pages 17-18). As discussed above, claim 1 on appeal does not exclude a strong mineral acid such as sulfuric or hydrochloric acid (note "comprises" as discussed above). The essential elements of claim 1 on appeal are the reaction of iminostilbene with an alkali cyanate in acetic acid to produce carbamazepine. Therefore Example 2 of Acklin discloses all the limitations of claim 1 on appeal. "Under 35 USC 102, every limitation of a claim must identically appear in a single prior art reference for it to anticipate the claim." *In re Bond*, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990). Accordingly, we determine that Acklin anticipates the subject matter of claim 1 on appeal, and claims 2-7 which stand or fall with claim 1. Disclosure of the one species within the scope of claim 1 on appeal (i.e., acetic acid from the genus of acetic acid, acetic acid with

water, and acetic acid with alcohol) is anticipation of the claim. *In re May*, 574 F.2d 1082, 1089, 197 USPQ 601, 607 (CCPA 1978). Furthermore, our reviewing court has sanctioned the practice of nominally basing rejections on § 103 when the claimed subject matter is anticipated by the prior art. Justification for this sanction is that lack of novelty is the "ultimate or epitome of obviousness". See *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); *May*, *supra*.

Appellants admit that Acklin discloses the "**additional**, optional use of an 'acidic agent' for accelerating the reaction" (Brief, page 5). Appellants argue that this acidic agent has only a catalytic role and is present in only small catalytic amounts (*Id.* and Reply Brief, page 4).

Appellants' argument is not well taken as claim 1 on appeal does not limit the amount of acetic acid present or recite any function for the acetic acid. All that is recited in claim 1 on appeal is a reaction of iminostilbene with alkali cyanate in acetic acid to produce carbamazepine.

Appellants further argue that the present invention produces unexpected benefits over Acklin in that the claimed reaction can be carried out in the presence of aqueous and alcoholic media while Acklin teaches the avoidance of these media (Brief, pages

5-6). Again it must be noted that claim 1 on appeal is not commensurate with appellants' arguments in that claim 1 may be limited to acetic acid as the medium (aqueous acetic acid and acetic acid with alcohol are alternative embodiments of claim 1).

Furthermore, appellants may rely on unexpected results only to the extent that the claimed subject matter is not anticipated by Acklin. See *Fracalossi, supra*.

Appellants argue that the examiner misstates the very distinction of the present invention over Acklin, i.e., acetic acid is used as a reactant in the claimed invention but Acklin teaches away from the use of acids weaker than formic acid as a reactant in the process of the reference (Reply Brief, pages 1-2). Appellants' argument is not persuasive since claim 1 on appeal does not specify that the acetic acid enters into the reaction with iminostilbene and the alkali cyanate but only specifies that the reaction is "in acetic acid". Therefore the use of acetic acid as a solvent or acidic agent catalyst, as taught by Acklin, would meet this limitation of claim 1 on appeal.

For the foregoing reasons, we determine that the examiner has established a *prima facie* case of obviousness. Based on the totality of the record, including the evidence and arguments



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submitted by appellants in rebuttal, we determine that the preponderance of evidence weighs in favor of obviousness within the meaning of 35 U.S.C. § 103. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Accordingly, the rejection of claims 1 through 7 under § 103 as unpatentable over Acklin is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED**



CHARLES F. WARREN  
Administrative Patent Judge



THOMAS A. WALTZ  
Administrative Patent Judge



CAROL A. SPIEGEL  
Administrative Patent Judge

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